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complete statistical and detailed account of the cost of trips in Europe and America. It promises to be a valuable guide-book for Americans.

— Henry Holt & Co. will add immediately to Sneath's series of modern Philosophers, volumes extracted from Reid by Dr. Sneath of Yale University; from Spinoza, by Professor Fullerton of the University of Pennsylvania; from Kant by Professor Watson of Queen's College, Canada; and from Descartes, by Professor Torrey of the University of Vermont. They contemplate adding, in the near future, volumes from Berkeley, Hume, and Hegel.

— "The Basis of the Demand for the Public Regulation of Industries" is the title of a monograph by the Hon. W. D. Dabney, which has recently been published by the American Academy of Political and Social Science. There have been numbers of plans suggested to remedy these evils, the most notable of which is, probably, socialism. Mr. Dabney thinks that this plan will not be adopted, but that government regulation of private business will be tried as remedy for the existing evils of private monopolies.

— The Department of Astronomy of the Brooklyn Institute of Arts and Sciences has just issued a "Hand-book of Astronomy for 1892." The publication is in a new field, and is one that will command general interest and constant use by a very large number of people who have considerable general knowledge of astronomy, and who desire to couple with information gained by reading a practical knowledge from experience and observation. The new publication is designed to aid in the observation of the planets and the constellations every hour when they are visible during the year 1892. The hand book will not only prove interesting to the "amateur" astronomer, but also to those who are working with instruments in observatories. It contains calendars of the eclipses of the sun and moon, of the periods of the inferior planets as morning and evening stars, and of the periods of the greatest brilliancy and elongation of the planets, a selection of the most important occultations of stars, calendars of the positions of the sun, moon, and planets for each day of each month, brief accounts of the opposition of Mars, of the evidence of Venus' rotation, tables showing the motions and positions of Jupiter's satellites, the names and positions of colored stars and double stars, tables of the variable stars of long periods and of short periods, accounts of the zodiacal light and the principal meteoric showers of the year, together with a great deal of valuable information concerning the satellites, the distances of planets and stars, the lengths of the years of the planets and the weights and dimensions of the members of the solar system. A calendar for the seasons and the church calendar are convenient additions. Copies of the hand-book may be purchased by members of the institute, or by others interested in astronomy, at twenty cents per copy, including postage.

CALENDAR OF SOCIETIES.

Philosophical Society, Washington.

Feb. 13.—Gardiner G. Hubbard, The History of the Education of the Deaf; A. W. Greely, Some Peculiarities in the Rainfall of Texas.

Society of Natural History, Boston.

Feb. 17.—George L. Goodale, Illustrations of Vegetation in Ceylon.

Publications received at Editor's Office.

BOWSER, EDWARD A. Elements of Plane and Solid Geometry. 2d ed. Boston, D. C. Heath & Co. 12° 393 p. $1.35.

BROCKWAY, FRED J. Essentials of Medical Physics. Phila., W. B. Saunders. 12°. 330 p. $1 net.

HARVARD COLLEGE. Annual Reports of the President and Treasurer, 1890-91. Cambridge, The University. 8°, paper. 294 p.

HEMPEL, WALTHER. Methods of Gas Analysis. Trans. from the German by L. M. Dennis. New York, Macmillan & Co. 12°. 401 p. $1.90.

LEFAVEL, CARRICA. Delsartean Physical Culture. New York, Fowler & Wells Co. 12°, paper. 108 p.

MCKILLOP, DUGALD. Shorthand and Typewriting. New York, Fowler & Wells Co. 12°, paper. 123 p.

MUNRO, J. Heroes of the Telegraph. London, Religious Tract Society. 12°, 288 p. $1.40.

MUSEUM OF FINE ARTS. Catalogue of the Print Department. Boston, The Museum. 12°, paper. 98 p.

SCOTT, W. The Lady of the Lake. Ed. by William J. Rolfe. Boston, Houghton, Mifflin & Co. 16°, paper. 273 p. 30 cents.

SCRIBNER'S MAGAZINE. Index to Vols. I-X. New York, Charles Scribner's Sons. 8°. 89 p.

THURSTON, ROBERT H. A Manual of the Steam Engine. Part II. Design, Construction and Operation. New York, John Wiley & Sons. 8°. 957 p.

WHITE, CHARLES E. Number Lessons. Boston, D. C. Heath & Co. 12°. 201 p. 45 cents.

Business Department.

Intending investors and others interested in real estate matters in the rapidly developing State of Washington are invited to give a careful reading of the advertisement of the Washington Fire Clay Company on first page of this number. Mr. C. Cooper Clark, Vice-President, will show photographs and blue prints of the property advertised. The writer is personally acquainted with all the officers and many of the stockholders of this company and can vouch for the entire reliability and truthfulness of any statements they may make.

Wants.

Any person seeking a position for which he is qualified by his scientific attainments, or any person seeking some one to fill a position of this character, be it that of a teacher of science, chemist, draughtsman, or what not, may have the 'Want' inserted under this head FREE OF COST, *if he satisfies the publisher of the suitable character of his application. Any person seeking information on any scientific question, the address of any scientific man, or who can in any way use this column for a purpose consonant with the nature of the paper, is cordially invited to do so.*

A PROFESSORSHIP in Chemistry is wanted by one who has had five years' experience in that capacity. Would prefer to give instruction by lectures and experiments rather than by text-book methods. Would like a position in a college or university where there is a good student's laboratory. Special points of strength claimed are: (1) Thorough control of a class and good order during lectures and recitations. (2) Accuracy in experimenting with chemicals and skill in the manipulation of chemical apparatus. The permission of several distinguished educators has been given to refer to them if required. Would not care to accept a position paying less than $1,500. Address B. E., care of *Science*, 874 Broadway, New York.

ADDRESS WANTED.—Will some one please send the address of the Secretary of the American Philological Society. Also that of Herbert Spencer. "ADDISON," Room 84, 164 Madison St., Chicago, Ill.

ADDRESSES of Old Book Dealers wanted.—Wishing to obtain a number of old books out of print, I very much desire the addresses or catalogues of rare second-hand book dealers. If there is a directory or list of such dealers I should like to obtain possession of one. W. A. BLAKELY, Chicago, Ill.

WANTED.—Books on the Magic Lantern. Will exchange, "How the Farm Pays," by Cozier and Henderson; "Culture of Farm Crops," by Stewart; "American Agriculturist," 1890 and 1891. I. SLEE ATKINSON, 43 Wallace St., Orange, N. J.

WANTED.—(1) A white man versed in wood and iron working, able to work from specifications and plans, suited for an instructor of boys; his business to have charge of shops of school, outline and direct the work for foremen and students; salary to be $1,000 per annum (nine months). (2) A man (black preferred) to teach the colored, iron working and forging, subordinate to the preceding; salary, $720. (3) A man (white) competent to take classes in engineering (assistant's position), but with the ability to perform any of the work required in any of the ordinary engineering courses of our universities; salary from $1,000 to $1,500. A. H. BEALS, Milledgeville, Ga.

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To exchange; Experiment Station bulletins and reports for bulletins and reports not in my file. I will send list of what I have for exchange. P. H. ROLFS, Lake City, Florida.

Finished specimens of all colors of Vermont marble for fine fossils or crystals. Will be given only for valuable specimens because of the cost of polishing. GEO. W. PERRY, State Geologist, Rutland, Vt.

For exchange.—Three copies of "American State Papers Bearing on Sunday Legislation," 1891, $2.50, new and unused, for "The Sabbath," by Harmon Kingsbury, 1840; "The Sabbath," by A. A. Phelps, 1842; "History of the Institution of the Sabbath Day, Its Uses and Abuses," by W. L. Fisher, 1859; "Humorous Phases of the Law," by Irving Browne; or other works amounting to value of books exchanged, on the question of governmental legislation in reference to religion, personal liberty, etc. If preferred, I will sell "American State Papers," and buy other books on the subject. WILLIAM ADDISON BLAKELY, Chicago, Ill.

Wanted, in exchange for the following works, any standard works on Surgery and on Diseases of Children: Wilson's "American Ornithology," 3 vols.; Coues' "Birds of the Northwest" and "Birds of the Colorado Valley," 2 vols.; Minot's "Land and Game Birds of New England;" Samuels' "Our Northern and Eastern Birds;" all the Reports on the Birds of the Pacific R. R. Survey, bound in 2 vols., morocco; and a complete set of the Reports of the Arkansas Geological Survey. Please give editions and dates in corresponding. R. ELLSWORTH CALL, High School, Des Moines, Iowa.

Wanted to buy or exchange a copy of Holbrook's North American Herpetology, by John Edwards. 5 vols. Philadelphia, 1842. G. BAUR, Clark University, Worcester, Mass.

For sale or exchange, LeConte, "Geology;" Quain, "Anatomy," 2 vols; Foster, "Physiology," Eng. edition; Shepard, Appleton, Elliott, and Stern, "Chemistry;" Jordan, "Manual of Vertebrates;" "International Scientists' Directory;" Vol. I. *Journal of Morphology;* Balfour, "Embryology," 2 vols.; Leidy, "Rhizopods;" *Science*, 18 vols., unbound. C. T. McCLINTOCK, Lexington, Ky.

To exchange Wright's "Ice Age in North America" and Le Conte's "Elements of Geology" (Copyright 1882) for "Darwinism," by A. R. Wallace, "Origin of Species," by Darwin, "Descent of Man," by Darwin, "Man's Place in Nature," Huxley, "Mental Evolution in Animals," by Romanes, "Pre-Adamites," by Winchell. No books wanted except latest editions, and books in good condition. C. S. Brown, Jr., Vanderbilt University, Nashville, Tenn.

For Sale or Exchange for books a complete private chemical laboratory outfit. Includes large Becker balance (200g to 1-10mg.), platinum dishes and crucibles, agate motors, glass-blowing apparatus, etc. For sale in part or whole. Also complete file of *Silliman's Journal*, 1862-1885 (62-71 bound); Smithsonian Reports, 1854-1883; U. S. Coast Survey. 1854-1869. Full particulars to enquirers. F. GARDINER, JR., Pomfret, Conn.

— The *Chautauquan* for March presents the following among other articles: Growth and Distribution of Population in the United States, by General Francis A. Walker; Physical Culture, II., by J. M. Buckley; National Agencies for Scientific Research, V., by Major J. W. Powell; Ocean Perils, by Felix L. Oswald, M.D.; The Ownership of Literary Property, by George Haven Putnam; Lyceum Attractions of To-day, by W. H. Stenger; The National Library and its Librarian, by Fannie C. W. Barbour; Words to the Deaf, by Katherine Armstrong; What Women Owe to Inventions, by Margaret N. Wishard.

— John Wiley & Sons have in preparation a work on timber and metallic structures entitled "Theory and Practice in the Designing of Modern Framed Structures." This book is written jointly by Professor J. B. Johnson, author of "Theory and Practice of Surveying," and professor of civil engineering in Washington University, St. Louis, by Mr. C. W. Bryan, designing engineer of the Edge Moor Bridge Works, Wilmington, Del., and by F. E. Turneaure, instructor in civil engineering in Washington University. It will describe in great detail the most modern and approved styles of structures and methods of analysis, giving only a historical review of obsolete forms of trusses and abandoned analytical methods. It will treat not only of bridges and roofs but also of trestles, viaducts, stand-pipes, elevated tanks, and steel skeletons for high buildings. It will be adapted to serve both as a text-book in the higher engineering schools and as a hand-book for the designing engineer.

— Houghton, Mifflin, & Co. have just ready "Mark Hopkins," illustrious as president of Williams College for thirty-six years, and as president of the American Board of Commissioners for Foreign Missions for thirty years, by Professor Franklin Carter, present president of Williams College; also a new work, by Dr. Josiah Royce, entitled "The Spirit of Modern Philosophy."

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